



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/629,332

07/29/2003

David Andrew Lilburn

070668-0107

6334

26371

7590

12/14/2004

FOLEY & LARDNER

777 EAST WISCONSIN AVENUE

SUITE 3800

MILWAUKEE, WI 53202-5308

EXAMINER

DESTA, ELIAS

ART UNIT

PAPER NUMBER

2857

DATE MAILED: 12/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/629,332	LILBURN ET AL.	
	Examiner	Art Unit	
	Elias Desta	2857	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-8, 11-32 and 34-43 is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☒ Claim(s) 9, 10 and 33 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>10/02/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

Detailed Action

Specification

1. The specification is objected to because of the following minor informalities:

- Page 1, line 14: change “To” to “In order to”;
- Page 2, line 30, delete the word “targets” after the word “weight” and;
- Page 3, line 28, delete the word “moreover”;

The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objection

2. Claims 9, 10 and 33 are objected to because of the following minor informalities:

In reference to claims 9, 10 and 33: change the word ‘machine direction’ to ‘machine-direction’.

Allowance

3. Claims 1-8, 11-32 and 34-43 are allowed. The following is an examiner's statement of reasons for allowance:

In reference to claims 1 and 26: Figiel (U.S. Patent 6,657,720) teaches method and apparatus for time synchronized measurement correction of multi-dimensional periodic effect on a moving web of paper (see Figiel, Figs. 1, 2 and 7-9). The system includes signal-processing units (see Figiel, Fig. 1, units 40 and 44) and measurement control unit (see Figiel, Fig. 1, unit 50). However, the system does not include statistical analysis module and the parameter measurement does not show having a periodic variations within a controllable frequency of the machine.

Unlike Figiel, the claimed invention includes all the features noted above and further provides that the statistical data analysis module is capable of being executed by the processor to analyze the measurement data and estimate a target shift in at least one quality parameter that could be made if the controllable variations were removed.

The remaining claims are dependent upon claims 1 and 26 and contain further limitations.

Citation of pertinent prior art:

- Shakarjian et al. (AACC Article, 'Multi-grade Modeling – Paperboard Quality Modeling') teaches a multi-grade modeling technique which allows the chemometrician to group families of similar products with two models.

- Anderson, Jr. et al., (U.S. Patent 4,936,141) teaches on-line paper sheet strength determination method and device.
- Ouellette et al. (U.S. Patent 4,644,174) teaches apparatus for analyzing the formation of a paper web.
- Shakespeare et al. (U.S. Patent 6,263,291) teaches method and apparatus for measuring color and/or composition.
- Shiratori et al. (U.S. Patent 5,974,160) teaches measuring method and apparatus of gloss irregularity and printing unevenness.
- Huhtelin (U.S. Patent 6,473,670) teaches method and apparatus for executing grade change in paper machine grade.
- Spinner et al. (U.S. Patent 5,771,174) teaches distributed intelligence actuator controller with peer-to-peer actuator communication in paper production environment where the intelligent actuator controller calculates target actuator positions based upon the transmitted information.
- Lodzinski et al. (U.S. Patent 3,992,100) teaches paper machine optical monitoring device with integral standardizing optical window.

Conclusion

4. This application is in condition for allowance except for the following formal matters: the specification and claim objections noted above.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.


A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elias Desta whose telephone number is (571)-272-2214. The examiner can normally be reached on M-Thu (8:30-7:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on (571)-272-2216. The fax phone numbers for the organization where this application or proceeding is assigned are (703)-872-9306 for regular communications and After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571)-272-1750.

Elias Desta
Examiner
Art Unit 2857


PATRICK ASSOUD
PRIMARY EXAMINER

Application/Control Number: 10/629,332
Art Unit: 2857

Page 6

-ed

December 08, 2004